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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,890	05/16/2006	Daejoon Cha	VT7-001US	7303

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EXAMINER	
CASCA, FRED A	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/544,890	CHA ET AL.	
	Examiner	Art Unit	
	Fred A. Casca	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 24-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22 and 24-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on November 20, 2007. Claims 1-22 and 24-36 are still pending in the present application. **This Action is made FINAL.**

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-6, 9-12, 14-25, 26-32 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richton (US 6,650,902 B1) in view of Iwatsuki et al (US 2004/0019676 A1) and further in view of Beauregard et al (US 2004/0193373 A1).

Referring to claim 1, Richton discloses a system for monitoring performance of a position determination of a mobile communication terminal by using a wireless network and an A(Assisted)-GPS (abstract, Figure 1-2 and col. 1, lines 40-55, "GPS"), the system comprising the mobile communication terminal equipped with a GPS module for picking up GPS (Location Based Service) radio wave containing a navigation data from a GPS satellite and transmitting the navigation data to the wireless network (Figures 1-2, col. 1, lines 40-55); a test device, connected to the mobile communication terminal through wired/radio link, for being loaded with and running a LBS wireless network analysis program (Figure 2-3, "location

based preference server", "location determination server", "location based controller"), wherein the LBS wireless network analysis program gathers, analyzes and processes data pertinent to the position determination and classifies processed data by at least one classification reference and displays classified data in the format of text or graph (Figures 2-5, "221", col. 2,lines 40-67, col. 9,lines 50-67, "longitude", "latitude"); and a position determination server for receiving the navigation data from the wireless network, converting the navigation data into longitude and latitude coordinate values, transmitting the longitude and latitude coordinate values to the mobile communication terminal and performs transmission and reception of the data pertinent to the position determination (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67, "longitude", "latitude").

Richton does not specifically disclose the LBS program analyzes and displays information on GPS satellite, each information on GPS satellite is distinctively indicated with different color, text or pattern on screen displaying more than one concentric circles and 4 directional intersections, the concentric circles consecutively indicating angles ranging from 0 to 90 degrees.

Iwatsuki discloses displaying network elements on a screen for monitoring purpose (paragraphs 45, 16, and Figures 1-2, 5, 8, and 14-24, "network monitoring system displays the status of various nodes and lines in a network of the present moment on a display screen based on physical network configuration and logical network configuration").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Richton by incorporating the teachings of Iwatsuki and consequently providing the system of Richton to have a monitoring system to monitor the network elements in

the format claimed by applicant, for the purpose of keeping track of the network elements and to discover and resolve an network problems as soon as they occur.

The combination of Richton/Iwatsuki does not disclose displaying GPS satellites with different text or pattern in the format disclosed by applicant.

Beauregard discloses GPS satellites indicated with different text or pattern displaying more than one concentric circle and 4 directional intersections, the concentric circles consecutively indicating angles ranging from 0 to 90 degrees (Figure 1).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the combo of Richton/Iwatsuki in the format claimed by the applicant, for the purpose of monitoring all network elements including the satellites and in such a specific way to clearly observe all network satellites and their operation pattern, and to discover and resolve and possible problems.

Referring to claim 3, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 2, and further disclose the LBS wireless network communication network analyzes the LBS message and consequently indicates the time information of transmission or reception of the LBS message, the name of the LBS message, and a type of message (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67), and wherein the type of message is whether the LBS message is a forward channel message, a reverse channel message, a request message or a response message (Figures 2-7 and corresponding columns, note that a LBS message is inherently either forward link or reverse link).

Referring to claim 4, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 3, wherein the name of the LBS message is one of "Request MS Information", "Request Pilot Phase Measurement", "Provide MS Information", "Provide Pilot Phase Measurement", "Request Pseudorange Measurement", "Provide Pseudorange Measurement", "Provide GPS Acquisition Assistance", "Provide GPS Sensitivity Assistance", "Request Location response" (Figures 2-7 and corresponding columns).

Referring to claim 5, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 1, wherein the LBS wireless network analysis program analyzes and displays information on the GPS satellite, wherein the information on the GPS satellites is more than one out of an azimuth angle, an elevation angle, a total number of the GPS satellites and an identification number of each satellite included in a "Provide GPS Acquisition" message (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67).

Referring to claim 6, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 1, wherein the LBS wireless communication analysis program analyzes and displays information on the GPS satellite, wherein the information on the GPS satellite is more than one out of a total number of the GPS satellites and an identification number of each satellite included in a "Provide Pseudorange Measurement" message (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67).

Referring to claim 9, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 1, wherein the mobile communication terminal communicates with the test device through an infra-red communication link, Bluetooth communication link or a radio frequency link (Figures 1-2, note that cellular is radio).

Referring to claim 10, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 1, wherein the mobile communication terminal exchanges the data pertinent to the position determination with the position determination server through a TCP/IP(Transmission Control Protocol/Internet Protocol) link (Fig. 3, "Internet").

Referring to claim 11, the combination of Richton/Iwatsuki/Beauregard disclose the system of claim 1, wherein the mobile communication terminal is one out of a PDA, a cellular phone, a PCS(Personal Communication Service) phone, a hand-held PC, a GSM(Global System for Mobile) phone, a W-CDMA phone, an EV-DO phone and a MBS(Mobile Broadband System) phone (Figures 1-2, col. 1, lines 35-50, "cell", note that a cell inherently has a base station and cell phone).

Referring to claim 12, claim 12 defines a method reciting features analogous to the features of claim 1 (as rejected above). Thus, the combination of Richton/Iwatsuki/Beauregard discloses all elements of claims 12 (please see the rejection of claim 1 above).

Referring to claim 14, the combination of Richton/Iwatsuki/Beauregard disclose the method of claim 12, wherein at step (a), the test device acquires the LBS messages from the mobile communication terminal through wired and/or radio link (Figures 2-7).

Referring to claim 15, the combination of Richton/Iwatsuki/Beauregard disclose the method of claim 12, wherein the receiving, analyzing, processing and displaying are preformed by a LBS wireless network analysis program loaded in the test device (Figures 2-7,).

Referring to claim 16, claim 16 defines medium reciting features analogous to the features of claim 1 (as rejected above). Thus, the combination of Richton/Iwatsuki/Beauregard discloses all elements of claims 16 (please see the rejection of claim 1 above).

Referring to claims 17-24 and 27-32, claims 17-25 and 27-32 define a medium reciting features analogous to the features of claim 3-11 (as rejected above). Thus, the combination of Richton/Iwatsuki/Beauregard discloses all elements of claims 16-25, 27-32 (please see the rejection of claim 3-11 above).

Referring to claim 36, the combination of Richton/Iwatsuki/Beauregard discloses the storage medium of claim 22, and further disclose each of the information on GPS satellite is distinctively indicated with different color, text or pattern on a screen displaying more than one concentric circles and 4 directional intersections, the concentric circles consecutively indicating angles ranging from 0 degree to 90 degrees (please see the rejection of claim 1).

Referring to claim 26, the combination of Richton/Iwatsuki/Beauregard discloses the storage medium of claim 25. The combination fails to specifically disclose mapping data is made in the format of WGS (World Geodetic System)-84, as claimed by applicant.

It would have been an obvious design choice to design the mapping of data in any format that the applicant has chosen since the applicant has not described any advantages of the WGS system, thus the design of the mapping system being in any other mapping system would have provided the same information as by WGS system.

4. Claims 2, 7-8, 13, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richton (US 6,650,902 B1) in view of Iwatsuki et al (US 2004/0019676 A1) and further in view of Beauregard et al (US 2004/0193373 A1) and still further in view of well known prior art (MPEP 2144.03).

Referring to claim 2, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 1, wherein the data pertinent to the position determination is a LBS message that the mobile communication terminal acquires from the position determination server (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67).

The combo does not disclose the LBS message being defined in the IS-801-1 standard.

The examiner takes official notice of the fact that IS-801-1 standard is well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the combo as claimed for the purpose of providing a more efficient and standardized and location service system.

Referring to claim 7, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 2, wherein the LBS wireless communication analysis program extracts and

displays information on the wireless network, a pseudo random noise code of a radio base station which transmits the LBS message and strength of the pseudo random noise code, from the LBS message (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67).

Referring to claim 8, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 7, wherein the wireless network is one out of a CDMA(Code Division multiple Access), GSM(Global system for Mobile communication), CDMA2000 IX, 3X, EV-DO, EV-DV, WCDMA(Wideband CDMA) and PI(Portable Internet) (Figures 1-5).

Referring to claim 13, claim 13 defines an method reciting features analogous to the features of claim 2 (as rejected above). Thus, the combination of Richton/Iwatsuki/Beauregard and Well-known prior art discloses all elements of claims 13 (please see the rejection of claim 2 above).

Referring to claim 33, the combination of Richton/Iwatsuki/Beauregard disclose the storage medium of claim 16. The combo does not disclose the storage medium is one out of a floppy disc, a hard disc, a ZIP disc, a JAZ disc, a compact disc and a DVD(Digital Versatile Disc).

The examiner takes official notice of the fact that a hard disc, a ZIP disc, a JAZ disc, a compact disc and a DVD(Digital Versatile Disc) are well known concepts in the art.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the combo for the purpose of using a reliable storing medium.

Referring to claim 34, the combination of Richton/Iwatsuki/Beauregard discloses the system of claim 2, wherein the LBS wireless network analysis program analyzes and displays information on the GPS satellite (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67).

The combo does not disclose the information on the GPS satellites is more than one out of an azimuth angle, an elevation angle, a total number of the GPS satellites and an identification number of each satellite included in a "Provide GPS Acquisition" message.

The examiner takes official notice of the fact that GPS satellites being more than one out of an azimuth angle, an elevation angle, a total number of the GPS satellites and an identification number of each satellite included in a "Provide GPS Acquisition" message are well known concepts in the art.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the combo as claimed for the purpose of providing a more efficient location service system.

Referring to claim 35, the combination of Richton/Iwatsuki/Beauregard and well known art disclose the system of claim 2, and further disclose the LBS wireless communication analysis program analyzes and displays information on the GPS satellite, wherein the information on the GPS satellite is more than one out of a total number of the GPS satellites and an identification number of each satellite included in a "Provide Pseudorange Measurement" message (Figures 2-7, "221", col. 2,lines 40-67, col. 9,lines 50-67).

Response to Arguments

5. Applicant's arguments with respect to claims 1-22 and 24-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER